AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method of associating a first processor with a set of computer-readable instructions in a multiprocessor system, comprising:

~~selecting a first set of computer-readable instructions;~~

selecting a first cluster from at least two clusters, each cluster having an associated priority indicator indicating the priority of the cluster, where the selected cluster is selected as a function of its priority indicator;

selecting the first processor from the cluster, the cluster comprising at least one other processor, each processor having an associated priority indicator, where the selected first processor is selected as a function of its priority indicator indicating the priority of the first processor; and,

associating the first processor with ~~the~~ a first set of computer-readable instructions and causing the first processor to execute the first set of computer-readable instructions.

2. (Original) The method as recited in claim 1 wherein the processors comprise CPU's.

3. (Original) The method as recited in claim 1 wherein the first set of computer-readable instructions comprise an application program.

4. (Original) The method as recited in claim 1 wherein the first set of computer-readable instructions comprise an processing thread.

5. (Original) The method as recited in claim 1 wherein the priority indicator associated with each processor is a function of the priority of each selected set of computer-readable instructions associated with the processor.

6. (Original) The method as recited in claim 1 wherein the priority indicator for each cluster is a function of the priority of each processor in the cluster.

7. (Original) The method as recited in claim 5 wherein the priority indicator for each cluster is a function of the priority of each processor in the cluster.

8. (Original) The method as recited in claim 1 comprising the step of adjusting the priority of the selected processor based on the priority of the first set of computer-readable instructions.

9. (Original) The method as recited in claim 1 the method as recited in claim 8 comprising the steps of selecting a second set of computer readable instructions and repeating the acts of

selecting a cluster and selecting a processor; and associating the selected processor with the second set of computer-readable instructions.

10. (Original) The method as recited in claim 1 comprising executing the first set of computer-readable instructions on the associated processor.

11. (Original) The method as recited in claim 1 wherein a cluster other than the first cluster is selected if the other cluster has a processor associated with the first set of computer readable instructions and the other cluster has no processors associated with the first set of computer-readable instructions.

12. (Original) The method as recited in claim 1 wherein a processor other than the first processor is selected if the first processor has already been associated with the first set of computer-readable instructions and the other processor has no association with the first set of computer-readable instructions.

13. (Currently Amended) A computer-readable storage medium having stored thereon computer executable instructions for associating a first processor with a first set of computer-readable instructions in a multiprocessor system, comprising:

~~selecting a first set of computer-readable instructions;~~

selecting a first cluster from at least two clusters, each cluster having an associated priority indicator indicating the priority of the cluster, where the selected cluster is selected as a function of its priority indicator;

selecting the first processor from the cluster, the cluster comprising at least two processors, including the first processor, each of the at least two processors having an associated priority indicator indicating the priority of each of the two processors, where the selected processor is selected as a function of its priority indicator; and

associating the first processor with ~~the~~ a first set of computer-readable instruction and causing the first processor to execute the first set of computer-readable instructions.

14. (Previously Presented) The computer-readable medium as recited in claim 13 wherein the processors comprise CPUs.

15. (Previously Presented) The computer-readable medium as recited in claim 13 wherein the first set of computer-readable instructions comprise an application program.

16. (Previously Presented) The computer-readable medium as recited in claim 13 wherein the first set of computer-readable instructions comprise an processing thread.

17. (Previously Presented) The computer-readable medium as recited in claim 13 wherein the priority indicator associated with each processor is a function of the priority of each selected set of computer-readable instructions associated with the processor.

18. (Previously Presented) The computer-readable medium as recited in claim 13 wherein the priority indicator for each cluster is a function of the priority of each processor in the cluster.

19. (Previously Presented) The computer-readable medium as recited in claim 17 wherein the priority indicator for each cluster is a function of the priority of each processor in the cluster.

20. (Previously Presented) The computer-readable medium as recited in claim 13 comprising the step of adjusting the priority of the selected processor based on the priority of the first set of computer-readable instructions.

21. (Previously Presented) The computer-readable medium as recited in claim 20 comprising the steps of selecting a second set of computer readable instructions and repeating the acts of selecting a cluster and selecting a processor; and associating the selected processor with the second set of computer-readable instructions.

22. (Previously Presented) The computer-readable medium as recited in claim 13 comprising executing the first set of computer readable instructions on the associated processor.

23. (Previously Presented) The computer-readable medium as recited in claim 13 wherein a cluster other than the first cluster is selected if the other cluster has a processor associated with the first set of computer readable instructions and the other cluster has no processors associated with the first set of computer-readable instructions.

24. (Previously Presented) The computer-readable medium as recited in claim 13 wherein a processor other than the first processor is selected if the first processor has already been associated with the first set of computer-readable instructions and the other processor has no association with the first set of computer-readable instructions.

25. (Currently Amended) A multiprocessor system of associating a first processor with a plurality of sets of computer readable instructions including a first set of computer-readable instructions, comprising:

a processor;

a computer-readable memory in communication with the processor and having stored thereon computer-readable instructions capable of:

~~selecting a first set of computer-readable instructions, where each set of computer readable instructions comprises an assigned priority;~~

selecting a first cluster from at least two clusters, each cluster having an associated priority indicator indicating the priority of the cluster where the selected cluster is selected as a function of its priority indicator;

selecting a first processor from the cluster, the cluster comprising at least two processors, including the first processor, each processor having an associated priority indicator indicating the priority of the processor, where the selected processor is selected as a function of its priority indicator; and

associating the first processor with ~~the~~ a first set of computer-readable instructions and causing the first processor to execute the first set of computer-readable instructions.

26. (Original) The system as recited in claim 25 wherein the processors comprise CPUs.

27. (Original) The system as recited in claim 25 wherein the first set of computer-readable instructions comprise an application program.

28. (Original) The system as recited in claim 25 wherein the first set of computer-readable instructions comprise an processing thread.

29. (Original) The system as recited in claim 25 wherein the priority indicator associated with each processor is a function of the priority of each selected set of computer-readable instructions associated with the processor.

30. (Original) The system as recited in claim 25 wherein the priority indicator for each cluster is a function of the priority of each processor in the cluster.

31. (Original) The system as recited in claim 29 wherein the priority indicator for each cluster is a function of the priority of each processor in the cluster.

32. (Original) The system as recited in claim 25 comprising the step of adjusting the priority of the selected processor based on the priority of the first set of computer-readable instructions.

33. (Original) The system as recited in claim 32 comprising the steps of selecting a second set of computer readable instructions and repeating the acts of selecting a cluster and selecting a processor; and associating the selected processor with the second set of computer-readable instructions.

34. (Original) The system as recited in claim 25 comprising executing the first set of computer-readable instructions on the associated processor.

35. (Original) The system as recited in claim 25 wherein a cluster other than the first cluster is selected if the other cluster has a processor associated with the first set of computer readable instructions and the other cluster has no processors associated with the first set of computer-readable instructions.

36. (Original) The system as recited in claim 35 wherein a processor other than the first processor is selected if the first processor has already been associated with the first set of computer-readable instructions and the other processor has no association with the first set of computer-readable instructions.